IASNFS Publications

- Ko, D.S., P.J. Martin, C.D. Rowley, and R.H. Preller, 2008: A real-time coastal ocean prediction experiment for MREA04, *J. Mar. Syst.*, 69, 17-28, doi:10.1016/j.jmarsys.2007.02.022.
  (This article describes the NRL Ocean Nowcast/Forecast System that is applied to the IASNFS.)

- Ko, D.S., R.H. Preller, and P.J. Martin, 2003: An experimental real-time Intra-Americas Sea Ocean Nowcast/Forecast System for coastal prediction, Proceedings, AMS 5th Conference on Coastal Atmospheric and Oceanic Prediction and Processes, 97-100.
  (This article describes the IASNFS and an evaluation mainly against NOS tide gauge data.)

  (The fallowing articles are applications of IASNFS and its nested high-resolution coastal ocean nowcast/forecast systems, e.g., NGOMNFS. During DWH oil spill the IASNFS/NGOMNFS was one of backbone models that provide daily forecast to NOAA HAZMAT, NESDIS for oil spill trajectory prediction to support Coast Guard and the Unified Command.)

- D'Sa, E., M. Korobkin, and D.S. Ko, 2011: Effects of Hurricane Ike on the Louisiana-Texas coast from satellite and model data, *Remote Sensing Lett.*, 2, 11-19, doi: 10.1080/01431161.2010.489057.
- Arnone, R.A., B. Casey, S. Ladner, D.S. Ko, and R.W. Gould, 2010: Forecasting the Coastal Optical Properties using Satellite Ocean Color, Oceanography from Space, eds. V. Barale et al., Springer Science+Business Media B. V., 335-348, doi:10.1007/978-90-481-8681-5_19.
- Nero, R.W., D.S. Ko, and I. McCoy, 2010: Assessment of the oceanic habitat of brown shrimp using dynamic linkages between offshore waters and estuarine nursery grounds, *Fisheries Oceanogr.*, submitted.
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- D'Sa, E.J., and D.S. Ko, 2008: Short-term influences on suspended particulate matter distribution in the northern Gulf of Mexico: Satellite and model observations, *Sensors*, 8, 4249-4264, doi:10.3390/s8074249.
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- Arnone, R.A., B. Casey, D. Ko, P. Flynn, L. Carrolo, and S. Ladner, 2007: Forecasting coastal optical properties using ocean color and coastal circulation models, *Proc. SPIE*, 6680, doi:10.1117/12.737201.
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- Chassignet, E.P., H.E. Hurlburt, O.M. Smedstad, C.N. Barron, D.S. Ko, R.C. Rhodes, J.F. Shriver, A.J. Wallcraft, and R.A. Arnone, 2005: Assessment of Data Assimilative Ocean Models in the Gulf of Mexico Using Ocean Color, Geophysical Monography 161 - Circulation in the Gulf of Mexico: Observations and Models, eds. W. Sturgers and A. Lugo-Fernandes, AGU, Washington D.C., 87-100.

- Evaluation of 2 operational models (RTOFS and NGOM) and 3 semi-operational research models (IASROMS, MITGOM and IASNFS) against satellite altimeter SSHA from Jason-1 and Jason-2 by Ed Zaron/PSU (2011/07)
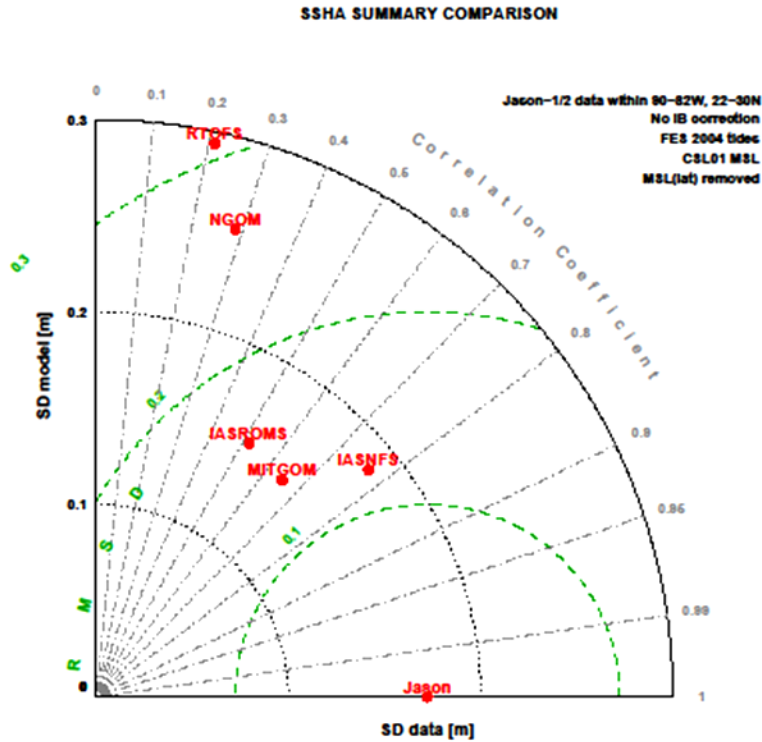
SSHA SUMMARY COMPARISON

FIGURE 11. Notes: this Taylor diagram summarizes spatial and temporal variance.

- SSH variance of models is too high for NGOM and RTOFS.
- SSH variance of IASROMS, MITGOM, and IASNFS is similar to Jason.
- Best model (based on correlation) is IASNFS.
- RMS difference (green scale) should be compared with altimeter SSH rms error, about 5cm.